

**Abstract of the Disclosure**

The present invention relates to a method of manufacturing a semiconductor device which may stably transfer an electrical signal by forming a plurality of via holes and contact holes to an underlying conductive layer. According to the present invention, even though a contact or via is electrically shorted, it is possible to stably transfer the electrical signal through the other contact hole(s) or via hole(s). The present method includes: forming a first conductive line on a semiconductor substrate; forming an insulating layer on the semiconductor substrate and the first conductive line; forming a plurality of via holes by selectively etching the insulating layer in order to expose the first conductive line; forming a metal barrier on top of the insulating layer and in the via holes; and forming a plug by depositing a conductive layer sufficiently to fill the via holes, and then planarizing the conductive layer to coplanarity with the insulating layer.